

Notice of Allowability

Application No.

09/767,897

Examiner

Wilson Lee

Applicant(s)

HA ET AL.

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 4/15/04.
2. ☒ The allowed claim(s) is/are 10-19,62-70,72-75,84 and 86-91.
3. ☐ The drawings filed on _____ are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
* Certified copies not received: _____.


Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6. ☒ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
(a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
(b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____.
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____.
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.


Wilson Lee
Primary Examiner
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Examiner's Amendment

This application is in condition for allowance except for the presence of claims 1-9, 20-61 to an invention non-elected with traverse in the reply filed on 9/30/03.

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. Paul Vargo on 7/9/04.

The application has been amended as follows:

In claims:

Claims 1-9, 20-61 have been canceled.

For clarification, applicant canceled claims 71, 76-83 and 85 in the previous amendments.

Allowable subject matter

Claims 10-19, 62-70, 72-75, 84, 86-91 are allowed.

The following is an examiner's statement of reasons for allowance:

The prior art neither discloses nor suggests:

- a control circuitry includes a capacitor voltage feedback circuit, and in response to a feedback signal therefrom, incrementally alters a capacitor charging parameter for a subsequent charging cycle so as to produce the

specified candela when the tube is energized such as required by claim 10;

- a control circuitry initiates each charging cycle by step-wise increasing a capacitor charging duty cycle parameter on a predetermined basis prior to altering that parameter in response to a feedback signal from the capacitor such as required by claim 62;
- a control circuitry carried in the housing coupled to the capacitor, and the specifying element and instructions for charging the capacitor in a closed control loop in accordance with the specifying element and received voltage to drive the source to produce the specified candela such as required by claim 68;
- a control circuitry, carried in the housing, coupled at least to the specifying element and a feedback circuit, the feedback circuit is also coupled to the capacitor wherein the control circuit alters a capacitor charging parameter in response to one feedback signal from the feedback circuit so as to produce the specified candela output at the light source; and wherein the at least one feedback signal comprises one of a digitized capacitor voltage value or a selected signal transition indicative of a capacitor voltage such as required by claim 84;
- a control circuitry, carried in the housing, coupled at least to the specifying element and a feedback circuit, the feedback circuit is also coupled to the capacitor wherein the control circuit alters a capacitor

charging parameter in response to' at least one feedback signal from the feedback circuit so as to produce the specified candela output at the light source; capacitor drive circuitry coupled between the control circuitry and the capacitor; and wherein the drive circuitry alters a capacitor charging current duty cycle in response to the control circuitry such as required by claim 87;

- a control circuitry, carried in the housing, coupled at least to the specifying element and a feedback circuit, the feedback circuit is also coupled to the capacitor wherein the control circuit alters a capacitor charging parameter in response to at least one feedback signal from the feedback circuit so as to produce the specified candela output at the light source; capacitor drive circuitry coupled between the control circuitry and the capacitor; wherein the drive circuitry includes a constant frequency, variable duty cycle capacitor charging current generator coupled to the control circuitry and to the capacitor wherein the control circuitry varies the charging current duty cycle in response to both the feedback signal and the candela specifying element such as required by claim 88;
- a control circuitry, carried in the housing, coupled at least to the specifying element and a feedback circuit, the feedback circuit is also coupled to the capacitor wherein the control circuit alters a capacitor charging parameter in response to one feedback signal from the feedback circuit so as to produce the specified candela output at the light

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source; and wherein the duty cycle is adjusted periodically in response to the feedback signal such as required by claim 89;

- a control circuitry, carried in the housing, coupled at least to the specifying element and a feedback circuit, the feedback circuit is also coupled to the capacitor wherein the control circuit alters a capacitor charging parameter in response to one feedback signal from the feedback circuit so as to produce the specified candela output at the light source, and wherein the control circuitry alters the charging current parameter periodically such as required by claim 90;
- a control circuitry, carried in the housing, coupled at least to the specifying element and a feedback circuit, the feedback circuit is also coupled to the capacitor wherein the control circuit repetitively charges the capacitor during a plurality of cycles and during each such cycle that circuitry alters a capacitor charging parameter in response to one feedback signal from the feedback circuit so as to produce the specified candela output at the light source such as required by claim 91.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Wilson Lee whose telephone number is (571) 272-1824.

Papers related to Technology Center 2800 applications may be submitted to Technology Center 2800 by facsimile transmission. Any transmission not to be considered an official response must be clearly marked "DRAFT". The official fax number is (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read "Wilson Lee", written over a horizontal line.

Wilson Lee
Primary Examiner
U.S. Patent & Trademark Office

7/9/04